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=> s (ethylene polymer# or polyethylene)(5w)oxygen

L1 1714 (ETHYLENE POLYMER# OR POLYETHYLENE)(5W) OXYGEN

=> s (melt mix? or extruder)(5a)oxygen

L2 193 (MELT MIX? OR EXTRUDER)(5A) OXYGEN

=> s l1 and l2

L3 17 L1 AND L2

=> d l3 1-17 ibib abs

L3 ANSWER 1 OF 17 USPATFULL on STN

ACCESSION NUMBER: 2004:51700 USPATFULL

TITLE: Oxygen tailoring of polyethylene film resins

INVENTOR(S): Wagner, James E., Houston, TX, UNITED STATES

Johnson, Jerry M., League City, TX, UNITED STATES

Joy, Dale J., Wimberley, TX, UNITED STATES

Robertson, Wesley J., Humble, TX, UNITED STATES

Cowell, Timothy J., Houston, TX, UNITED STATES

NUMBER	KIND	DATE
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PATENT INFORMATION:	US 2004039131	A1	20040226
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APPLICATION INFO.:	US 2003-612747	A1	20030702 (10)
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NUMBER	DATE
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PRIORITY INFORMATION:	US 2002-393939P	20020703 (60)
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DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: EXXONMOBIL CHEMICAL COMPANY, P O BOX 2149, BAYTOWN, TX, 77522-2149

NUMBER OF CLAIMS: 51

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 956

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Processes are disclosed for oxygen-tailoring polyethylene resin.

Polyethylene resin is conveyed through a feed zone, a melt-mixing zone and a melt zone. The resin is contacted with oxygen in an amount of at least 40 parts by weight O.sub.2 per million parts by weight resin, and contacted with primary antioxidant downstream of the point or points of oxygen contact. The oxygen-treated resin can be used to make

polyethylene film having improved gauge uniformity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 17 USPATFULL on STN

ACCESSION NUMBER: 2003:44505 USPATFULL  
TITLE: Oxygen scavenging PET based polymer  
INVENTOR(S): Schiraldi, David Anthony, Charlotte, NC, UNITED STATES  
Sekelik, Douglas John, Greer, SC, UNITED STATES  
Smith, Brad Lee, Wilmington, NC, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003031815	A1	20030213
	US 6544611	B2	20030408
APPLICATION INFO.:	US 2001-920558	A1	20010801 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	KoSa, 4501 Charlotte Park Drive, Charlotte, NC, 28217-1979		
NUMBER OF CLAIMS:	36		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Page(s)		
LINE COUNT:	612		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention improves the effectiveness of the oxygen scavenging composition and maintains an excellent balance in the color properties of the polymer. The present invention relates to an improved oxygen scavenging PET based copolymer comprising from about 10 to about 120 ppm cobalt based on the PET polymer, and from about 15 to about 150 ppm zinc based on the PET polymer. The present invention also comprises a process for preparing a PET based oxygen scavenging copolymer, comprising the steps of:

- polymerizing a PET based polymer;
- adding Zn, Co, and an oxygen scavenging compound during said polymerizing step;
- copolymerizing said oxygen scavenging compound with said PET based polymer to form a copolymer; and
- extruding said copolymer.

The present invention also comprises an oxygen barrier container having one or more layers of a PET based oxygen scavenging copolymer having from about 10 to about 120 ppm Co based on said PET polymer, and from about 15 to about 150 ppm Zn based on the PET polymer; and an oxygen scavenging compound wherein said Co and said Zn are catalysts for said oxygen scavenging compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 17 USPATFULL on STN

ACCESSION NUMBER: 2002:165297 USPATFULL  
TITLE: Oxygen-scavenging compositions and articles  
INVENTOR(S): Chiang, Weilong L., Naperville, IL, UNITED STATES  
Tsai, Boh C., Inverness, IL, UNITED STATES  
Chen, Stephen Y., Wheaton, IL, UNITED STATES  
Venkateshwaran, Lakshmi N., Freehold, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002086929	A1	20020704

APPLICATION INFO.: US 6586514 B2 20030701  
 US 2002-39736 A1 20020104 (10)  
 RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-44043, filed on 18 Mar 1998, PENDING Continuation-in-part of Ser. No. US 1995-483302, filed on 7 Jun 1995, PATENTED Continuation-in-part of Ser. No. US 1994-249758, filed on 25 May 1994, ABANDONED Division of Ser. No. US 1993-92722, filed on 16 Jul 1993, ABANDONED  
 DOCUMENT TYPE: Utility  
 FILE SEGMENT: APPLICATION  
 LEGAL REPRESENTATIVE: JoAnn Villamizar, Patent Department, Ciba Specialty Chemicals Corp., 540 White Plains Road, P.O. Box 2005, Tarrytown, NY, 10591-9005  
 NUMBER OF CLAIMS: 20  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 2034  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oxygen-scavenging compositions comprising an oxidizable metal component, an electrolyte component and a solid, non-electrolytic, acidifying component. When blended with soft, flexible polymeric resins, these compositions exhibit good oxygen-scavenging performance with improved oxidation efficiency relative to compositions containing an oxidizable metal component, an electrolyte, and an acidifying component combined with a more rigid thermoplastic resins. Selection of a thermally stable non-electrolytic, acidifying component is important when melt compounding the compositions into polymeric resins and particularly for extrusion coating applications. The compositions can be used directly as an oxygen absorbent resin melt-fabricated into a wide variety of oxygen-scavenging packaging articles or as concentrates in combination with other thermoplastic resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 17 USPATFULL on STN  
 ACCESSION NUMBER: 2001:222884 USPATFULL  
 TITLE: OXYGEN ABSORBING COMPOSITION, OXYGEN ABSORBING RESIN COMPOSITION USING THE OXYGEN ABSORBING COMPOSITION, AND PRESERVING METHOD UTILIZING THESE COMPOSITIONS  
 INVENTOR(S): SAKAMOTO, MASARU, TOKYO, Japan  
 NAGATA, MASAKI, TOKYO, Japan

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001048096	A1	20011206
	US 6596191	B2	20030722
APPLICATION INFO.:	US 1999-324649	A1	19990603 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-154461	19980603
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	THOMAS W COLE ESQ, SIXBEY FRIEDMAN LEEDOM & FERGUSON, 8180 GREENSBORO DRIVE, SUITE 800, MCLEAN, VA, 22102	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1076	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided is an oxygen absorbing composition and an oxygen absorbing resin composition employing such oxygen absorbing composition, which demonstrate a favorable oxygen absorbing performance even in a low-humidity environment. Use of such oxygen absorbing composition and oxygen absorbing resin composition allows preservation of medicines or foods etc. which are in a dry state and disfavoring moisture.

The oxygen absorbing composition according to the present invention comprises iron powder/iodine, or iron powder/iodine/metallic iodine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 5 OF 17 USPATFULL on STN

ACCESSION NUMBER: 2001:145342 USPATFULL

TITLE: OXYGEN-SCAVENGING COMPOSITIONS AND ARTICLES

INVENTOR(S): CHIANG, WEILONG L., NAPERVILLE, IL, United States  
 TSAI, BOH C., INVERNESS, IL, United States  
 CHEN, STEPHEN Y., WHEATON, IL, United States  
 VENKATESHWARAN, LAKSHMI N., FREEHOLD, NJ, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001018480	A1	20010830
	US 6369148	B2	20020409
APPLICATION INFO.:	US 1998-44043	A1	19980318 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-483302, filed on 7 Jun 1995, GRANTED, Pat. No. US 5744056 Continuation-in-part of Ser. No. US 1994-249758, filed on 25 May 1994, ABANDONED Division of Ser. No. US 1993-92722, filed on 16 Jul 1993, ABANDONED		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	CIBA SPECIALTY CHEMICALS CORPORATION, PATENT DEPARTMENT, 540 WHITE PLAINS RD, P O BOX 2005, TARRYTOWN, NY, 10591-9005		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2030		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oxygen-scavenging compositions comprising an oxidizable metal component, an electrolyte component and a solid, non-electrolytic, acidifying component. When blended with soft, flexible polymeric resins, these compositions exhibit good oxygen-scavenging performance with improved oxidation efficiency relative to compositions containing an oxidizable metal component, an electrolyte, and an acidifying component combined with a more rigid thermoplastic resins. Selection of a thermally stable non-electrolytic, acidifying component is important when melt compounding the compositions into polymeric resins and particularly for extrusion coating applications. The compositions can be used directly as an oxygen absorbent resin melt-fabricated into a wide variety of oxygen-scavenging packaging articles or as concentrates in combination with other thermoplastic resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 17 USPATFULL on STN

ACCESSION NUMBER: 1999:116892 USPATFULL

TITLE: Polyolefin films having increased gas permeability and method for making

INVENTOR(S): Brant, Patrick, Seabrook, TX, United States

PATENT ASSIGNEE(S): Exxon Chemical Patents, Inc., Baytown, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5958319		19990928
APPLICATION INFO.:	US 1996-686042		19960724 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Nakarani, D. S.		

ASSISTANT EXAMINER: Tarazano, D. Lawrence  
LEGAL REPRESENTATIVE: Miller, D. W.  
NUMBER OF CLAIMS: 10  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 800

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films, made of polyethylenes, and articles made therefrom exhibit, for a given density, improved oxygen transmission. The polyethylenes are produced in a metallocene-catalyzed production process. The films may be made by a cast film process, and may be made under conditions that raise the birefringence and the oxygen transmission rate of the film, such as increasing strain rate decreasing melt temperature, increasing quench rates, or may be post-extrusion treated, for instance annealed or cold drawn. Combinations of both extrusion techniques and post-extrusion techniques may also be used. Polyethylenes utilized for making such films typically have a Composition Distribution Breadth Index above 50%, a M.sub.w /M.sub.n below 3, and a M.sub.z /M.sub.w below 2. The permeability of the films so made will be 50% or more above the permeability of films based on similar resins based on previously used film formation techniques.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 17 USPATFULL on STN

ACCESSION NUMBER: 1998:110787 USPATFULL  
TITLE: Article for scavenging oxygen from a container  
INVENTOR(S): Frisk, Peter, Chicago, IL, United States  
PATENT ASSIGNEE(S): Tetra Laval Holdings & Finance, S.A., Pully, Switzerland (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5806681		19980915
APPLICATION INFO.:	US 1996-729221		19961009 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Kelly, C. H.		
LEGAL REPRESENTATIVE:	Catania, Michael A.		
NUMBER OF CLAIMS:	3		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)		
LINE COUNT:	563		

AB An article composed of a polymer material integrated with an oxygen scavenging agent is disclosed that is suitable for oxygen sensitive contents. Once affixed to the interior of a container, the novel article is capable of scavenging excess oxygen from the enclosed atmosphere of the container without substantially modifying the design of similar container. The article is composed of a polymer material integrated with an oxygen scavenging agent between 0.1 and 1.0 grams. One aspect of the article is a thin film which only surrounds the atmosphere of the container. In most container configurations, the article would be the neck portion of the container. Another aspect of the article is a thin film affixed to the bottom of a sealing cap for the container. The polymer material may be a polyolefin such as **polyethylene**. The **oxygen** scavenging agent may be selected from iron based compounds, organic compounds and biologically active compounds. More specifically, the iron based compounds may be selected from pure iron, iron containing organic compounds, FeO.sub.X, and Fe.sub.X O.sub.Z (OH).sub.T. The organic compounds used as oxygen scavenging agents may be selected from ascorbic acid, vitamin E, vitamin B and most other vitamins. The article is in direct contact with the gaseous contents of the atmosphere of the container. The present invention also discloses a method for fabricating an oxygen scavenging container.

L3 ANSWER 8 OF 17 USPATFULL on STN

ACCESSION NUMBER: 1998:39656 USPATFULL  
TITLE: Process for modifying a polyethylene in an extruder  
INVENTOR(S): Piana, Alain, Martigues, France  
PATENT ASSIGNEE(S): BP Chemicals Limited, London, England (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5739266		19980414
APPLICATION INFO.:	US 1995-515830		19950816 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1995-9410630	19950830
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Weber, Thomas R.	
LEGAL REPRESENTATIVE:	Brooks Haidt Haffner & Delahunty	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
LINE COUNT:	722	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for modifying a polyethylene in an extruder by bringing the **polyethylene** into contact with **oxygen** or a gas mixture containing **oxygen** in the **extruder**, optionally in the presence of a relatively small quantity or preferably in the absence of short-term antioxidant agent. The polyethylene is then treated thermomechanically in the molten state in the extruder supplying a relatively high specific mechanical energy, the thermomechanical treatment is completed when the value of the loss tangent of the polyethylene characterizing its viscoelastic state decreases in a desired proportion. The polymer thus treated is particularly suitable for being transformed by blown extrusion into a film having a considerably increased bubble stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 9 OF 17 USPATFULL on STN

ACCESSION NUMBER: 88:40547 USPATFULL  
TITLE: Multi-layer polymeric structure  
INVENTOR(S): Sumi, Takehiko, Kanagawa, Japan  
Matsumoto, Kazuya, Kanagawa, Japan  
PATENT ASSIGNEE(S): Kyoraku Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4753845		19880628
APPLICATION INFO.:	US 1987-3959		19870116 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1986-18854	19860130
	JP 1986-39296	19860226
	JP 1986-181973	19860804
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Lesmes, George F.	
ASSISTANT EXAMINER:	Zirker, D. R.	
LEGAL REPRESENTATIVE:	Kananen, Ronald P.	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1100

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A multi-layer polymeric structure useful for packages comprises at least one protective layer of hydrophobic resin and at least one layer of water-sensitive oxygen barrier resin. This multi-layer polymeric structure is characterized by incorporating in the oxygen barrier layer at least one macromolecular compound selected from the group consisting of high polymers of a three-dimensional network structure containing hydrophilic groups and water-soluble macromolecular compounds containing ionizing groups.

Optionally, the oxygen barrier layer and the protective layer may be joined through the medium of an additional layer of adhesive resin in a laminated form.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 10 OF 17 USPATFULL on STN

ACCESSION NUMBER: 81:54764 USPATFULL

TITLE: Polyamides containing oxidized polyethylene

INVENTOR(S): Heydenreich, Frieder, Ratingen, Germany, Federal Republic of

Korber, Helmut, Odenthal, Germany, Federal Republic of  
Tacke, Peter, Krefeld, Germany, Federal Republic of  
Fahner, Friedrich, Krefeld, Germany, Federal Republic of

PATENT ASSIGNEE(S): Neuray, Dieter, Krefeld, Germany, Federal Republic of  
Bayer Aktiengesellschaft, Germany, Federal Republic of  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4293662		19811006
APPLICATION INFO.:	US 1979-99844		19791203 (6)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1978-971386, filed on 20 Dec 1978, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1978-2805892	19780213
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Lieberman, Paul	
LEGAL REPRESENTATIVE:	Connolly and Hutz	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
LINE COUNT:	237	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB High impact resistant polymer blends comprising 70-99% by weight of a polyamide and 1-30% by weight of a polyethylene having been oxidized by a special process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 11 OF 17 USPAT2 on STN

ACCESSION NUMBER: 2003:44505 USPAT2

TITLE: Oxygen scavenging PET based polymer

INVENTOR(S): Schiraldi, David Anthony, Charlotte, NC, United States  
Sekelik, Douglas John, Greer, SC, United States  
Smith, Brad Lee, Wilmington, NC, United States

PATENT ASSIGNEE(S): Arteva North America S.A.R.L., Zurich, SWITZERLAND  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6544611	B2	20030408
APPLICATION INFO.:	US 2001-920558		20010801 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Short, Patricia A.		
LEGAL REPRESENTATIVE:	Clements, Gregory N.		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	608		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention improves the effectiveness of the oxygen scavenging composition and maintains an excellent balance in the color properties of the polymer. The present invention relates to an improved oxygen scavenging PET based copolymer comprising from about 10 to about 120 ppm cobalt based on the PET polymer, and from about 15 to about 150 ppm zinc based on the PET polymer. The present invention also comprises a process for preparing a PET based oxygen scavenging copolymer, comprising the steps of:

- a) polymerizing a PET based polymer;
- b) adding Zn, Co, and an oxygen scavenging compound during said polymerizing step;
- c) copolymerizing said oxygen scavenging compound with said PET based polymer to form a copolymer; and
- d) extruding said copolymer.

The present invention also comprises an oxygen barrier container having one or more layers of a PET based oxygen scavenging copolymer having from about 10 to about 120 ppm Co based on said PET polymer, and from about 15 to about 150 ppm Zn based on the PET polymer; and an oxygen scavenging compound wherein said Co and said Zn are catalysts for said oxygen scavenging compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 17 USPAT2 on STN

ACCESSION NUMBER:	2002:165297 USPAT2
TITLE:	Oxygen-scavenging compositions and articles
INVENTOR(S):	Chiang, Weilong L., Naperville, IL, United States Tsai, Boh C., Inverness, IL, United States Chen, Stephen Y., Wheaton, IL, United States Venkateshwaran, Lakshmi N., Freehold, NJ, United States
PATENT ASSIGNEE(S):	Ciba Specialty Chemicals Corporation, Tarrytown, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6586514	B2	20030701
APPLICATION INFO.:	US 2002-39736		20020104 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1998-44043, filed on 18 Mar 1998 Continuation-in-part of Ser. No. US 1995-483302, filed on 7 Jun 1995, now patented, Pat. No. US 5744056 Continuation-in-part of Ser. No. US 1994-249758, filed on 25 May 1994, now abandoned Division of Ser. No. US 1993-92722, filed on 16 Jul 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Cain, Edward J.		

LEGAL REPRESENTATIVE: Stevenson, Tyler A., Crichton, David R.  
NUMBER OF CLAIMS: 13  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 1894

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oxygen-scavenging compositions comprising an oxidizable metal component, an electrolyte component and a solid, non-electrolytic, acidifying component. When blended with soft, flexible polymeric resins, these compositions exhibit good oxygen-scavenging performance with improved oxidation efficiency relative to compositions containing an oxidizable metal component, an electrolyte, and an acidifying component combined with a more rigid thermoplastic resins. Selection of a thermally stable non-electrolytic, acidifying component is important when melt compounding the compositions into polymeric resins and particularly for extrusion coating applications. The compositions can be used directly as an oxygen absorbent resin melt-fabricated into a wide variety of oxygen-scavenging packaging articles or as concentrates in combination with other thermoplastic resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 17 USPAT2 on STN

ACCESSION NUMBER: 2001:222884 USPAT2  
TITLE: Oxygen absorbing composition, oxygen absorbing resin composition using the oxygen absorbing composition, and preserving method utilizing these compositions  
INVENTOR(S): Sakamoto, Masaru, Tokyo, JAPAN  
Nagata, Masaki, Tokyo, JAPAN  
PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Company, Inc., Tokyo, JAPAN  
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6596191	B2	20030722
APPLICATION INFO.:	US 1999-324649		19990603 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-154461	19980603
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Mulcahy, Peter D.	
LEGAL REPRESENTATIVE:	Nixon Peabody LLP, Stamper, Adele M.	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	1066	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Provided is an oxygen absorbing composition and an oxygen absorbing resin composition employing such oxygen absorbing composition, which demonstrate a favorable oxygen absorbing performance even in a low-humidity environment. Use of such oxygen absorbing composition and oxygen absorbing resin composition allows preservation of medicines or foods etc. which are in a dry state and disfavoring moisture.

The oxygen absorbing composition according to the present invention comprises iron powder/iodine, or iron powder/iodine/metallic iodine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 14 OF 17 USPAT2 on STN

ACCESSION NUMBER: 2001:145342 USPAT2  
TITLE: Oxygen-scavenging compositions and articles

INVENTOR(S): Chiang, Weilong L., Naperville, IL, United States  
Tsai, Boh C., Inverness, IL, United States  
Chen, Stephen Y., Wheaton, IL, United States  
Venkateshwaran, Lakshmi N., Freehold, NJ, United States  
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corporation, Tarrytown, NY,  
United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6369148	B2	20020409
APPLICATION INFO.:	US 1998-44043		19980318 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-483302, filed on 7 Jun 1995, now patented, Pat. No. US 5744056 Continuation-in-part of Ser. No. US 1994-249758, filed on 25 May 1994, now abandoned Division of Ser. No. US 1993-92722, filed on 16 Jul 1993, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Hoke, Veronica P.		
LEGAL REPRESENTATIVE:	Stevenson, Tyler A.		
NUMBER OF CLAIMS:	5		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)		
LINE COUNT:	1871		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Oxygen-scavenging compositions comprising an oxidizable metal component, an electrolyte component and a solid, non-electrolytic, acidifying component. When blended with soft, flexible polymeric resins, these compositions exhibit good oxygen-scavenging performance with improved oxidation efficiency relative to compositions containing an oxidizable metal component, an electrolyte, and an acidifying component combined with a more rigid thermoplastic resins. Selection of a thermally stable non-electrolytic, acidifying component is important when melt compounding the compositions into polymeric resins and particularly for extrusion coating applications. The compositions can be used directly as an oxygen absorbent resin melt-fabricated into a wide variety of oxygen-scavenging packaging articles or as concentrates in combination with other thermoplastic resins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:454213 CAPLUS

DOCUMENT NUMBER: 139:22965

TITLE: Oxygen tailoring of polyethylene resins during melt extrusion

INVENTOR(S): Schregenberger, Sandra D.; Lottes, James F.;  
Shirodkar, Pradeep P.; Shannon, Porter C.

PATENT ASSIGNEE(S): Exxonmobil Chemical Patents Inc., USA

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003047839	A1	20030612	WO 2002-US32243	20021009
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

EP 1461197 A1 20040929 EP 2002-776192 20021009  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

PRIORITY APPLN. INFO.: US 2001-334563P P 20011130  
US 2002-406706P P 20020829  
WO 2002-US32243 W 20021009

AB A process for extruding a polyethylene homopolymer or copolymer having a bimodal mol. weight distribution is conveyed through an **extruder** and contacted with **oxygen**. The polyethylene is processed in an extruder having a feed zone in which the resin is not melted, a mixing zone in which at least a portion of the resin is melted, and a melt zone in which the resin is in a molten state. Each extrusion zone is partially filled with resin in contacted with a gas mixture containing oxygen in 8 to 40

%

by volume in the melt zone. The resulting oxygen-tailored resin can be used to make polyethylene films having improved bubble stability and gauge uniformity. The resin can be further pelletized.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:511325 CAPLUS  
DOCUMENT NUMBER: 131:131066  
TITLE: Method for manufacturing a DC cable  
INVENTOR(S): Carstensen, Peter  
PATENT ASSIGNEE(S): Asea Brown Boveri AB, Swed.  
SOURCE: PCT Int. Appl., 22 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940589	A1	19990812	WO 1999-SE148	19990204
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
SE 9800347	A	19990807	SE 1998-347	19980206
SE 511942	C2	19991220		
ZA 9900836	A	19990806	ZA 1999-836	19990203
AU 9926496	A1	19990823	AU 1999-26496	19990204
PRIORITY APPLN. INFO.:			SE 1998-347	A 19980206
			WO 1999-SE148	W 19990204

AB An insulated elec. DC-cable is manufactured by extruding a polymer-based insulation system comprising a compounded polyethylene around a conductor and subsequently crosslinking the PE composition. The PE composition is pretreated such that the resulting crosslinked PE (XLPE) composition comprises polar groups bonded to the crosslinked structure. Mol. O is introduced into the compounded PE composition during this pretreatment in an extruder, prior to the

PE composition being extruded from the extruder head.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:287971 CAPLUS

DOCUMENT NUMBER: 124:290671

TITLE: Treating **ethylene polymer** with  
**oxygen** in **extruder** before blow  
molding of film

INVENTOR(S): Paina, Alain

PATENT ASSIGNEE(S): Bp Chemicals Limited, UK; Bp Chemicals S.N.C.

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 700769	A2	19960313	EP 1995-305665	19950814
EP 700769	A3	19960320		
EP 700769	B1	20000329		
R: BE, DE, ES, FR, GB, IT, NL, SE				
FR 2723880	A1	19960301	FR 1994-10630	19940830
FR 2723880	B1	19970103		
ES 2144578	T3	20000616	ES 1995-305665	19950814
US 5739266	A	19980414	US 1995-515830	19950816
ZA 9506934	A	19970218	ZA 1995-6934	19950818
CA 2156894	AA	19960301	CA 1995-2156894	19950824
NO 9503384	A	19960301	NO 1995-3384	19950829
FI 9504063	A	19960302	FI 1995-4063	19950830
JP 08090633	A2	19960409	JP 1995-222425	19950830

PRIORITY APPLN. INFO.: FR 1994-10630 A 19940830

AB A molten ethylene polymer or copolymer (e.g., with 1-butene) is contacted  
with O in an extruder to give a modified polymer which shows good bubble  
stability during the manufacture of blown film.

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COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

68.23 68.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE

-2.10 -2.10

STN INTERNATIONAL LOGOFF AT 02:12:29 ON 01 OCT 2004